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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,895	02/14/2002	Naoki Tanaka	020187	6725

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ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

SUMMONS, BARBARA

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,895

Applicant(s)

TANAKA ET AL.

Examiner

Barbara Summons

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 2-8 and 10-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-8 and 10-18 is/are allowed.
- 6) ☒ Claim(s) 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8/2/03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The replacement sheets of drawings were received on 9/8/03. These drawings are approved.

Maintained Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 19-21 are rejected under 35 U.S.C. § 102(e) as being anticipated by Takamine U.S. 6,556,100 (of record) for reasons of record repeated below.

Fig. 1 of Takamine discloses a longitudinally coupled multiple mode (see Figs. 8A and 8B) SAW filter 101 comprising a plurality of IDTs 103-105 disposed on a piezoelectric substrate (not shown, see col. 5, lns. 6-8), and wherein: a middle IDT 104 is flanked on each side by side IDTs 103 and 105; a comb electrode of the middle IDT 104 is connected with an input terminal (i.e. coming from resonator 102)[Note that SAW filters are reciprocal devices so either terminal may be the input and the other the output]; a comb electrode of the IDTs 103 and 105 on each side of the middle IDT is

connected with an output terminal 119; the width and pitch of adjacent electrode fingers of the input IDT 104 and the output IDTs 103 and 105 (i.e. in areas 103a, 104a, 104b, and 105a, see col. 5, lns. 35-43) are designed to be smaller and narrower, respectively, than the width and pitch of the other electrode fingers (ibid.). Regarding the width of the electrode fingers being smaller, this can be seen in Fig. 1 and is required because the duty of the IDTs is a constant 0.60 (see col. 6, lns. 22-26). Therefore, if the pitch is narrower, the width of the fingers must get smaller to maintain the 0.60 duty ratio. Regarding claim 21, there are a plurality of four electrode fingers in the narrow pitch/small width portions (see col. 5, lns. 53-56 and 65-66).

Allowable Subject Matter

4. Claims 2-8 and 10-18 are allowable over the prior art of record.

Response to Arguments

5. Applicant's arguments filed 9/8/03 have been fully considered but they are not persuasive.

Regarding claims 19 and 20, Applicants argue that Takamine discloses narrow pitch finger portions that "include more than one electrode finger" (see page 15, second paragraph of the amendment received 9/8/03) that have the same narrow width (see page 15, third paragraph) and thus, Takamine fails to disclose the limitation that "*the width of adjacent electrode fingers of an input IDT and an output IDT is designed to be smaller than the width of other electrode fingers*" (emphasis added)[see page 15, fourth paragraph]. This argument is deemed not persuasive because it is limiting the claims to

only the two adjacent fingers being the same narrow width and no more fingers, which is not clearly stated in the claims and is not believed to be the intended meaning of the claims due to the explicit recitation in claim 21, that their be "a plurality of adjacent electrode fingers of the input IDT and the output IDT...designed to be smaller than the width of the other electrode fingers" (see claim 21, Ins. 3-4). If the Examiner were to accept the argument, then Takamine would reject dependent claim 21, but not the independent claims 19 and 20, thus raising 112 issues of contradictory claims and claims not being further limiting. Therefore, the Examiner considers the argument to not be commensurate with the scope of the actual claim language taken at its broadest meaning, and finds the argument not persuasive.

Conclusion

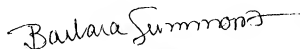
6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Summons whose telephone number is (703) 308-4947. The examiner can normally be reached on M-Th, M-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Pascal can be reached on (703) 308-4909. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink that reads "Barbara Summons". The signature is fluid and cursive, with a horizontal line extending from the end of the name.

BARBARA SUMMONS
PRIMARY EXAMINER

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November 26, 2003